



1 10. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet  
2 payload, wherein the Ethernet header has an Ethernet source address and an Ethernet  
3 destination address, and wherein the Ethernet destination address is the address of a real  
4 host.

1 11. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet  
2 payload, wherein the Ethernet header has an Ethernet source address and an Ethernet  
3 destination address, and wherein the Ethernet destination address is the address of a  
4 virtual host.

1 12. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet  
2 payload, wherein the Ethernet header has an Ethernet source address and an Ethernet  
3 destination address, and wherein the flow identifier is a the Ethernet source address.

1 13. The method of claim 1, wherein the packet has an Ethernet packet header and an Ethernet  
2 payload, wherein the Ethernet header has an Ethernet source address and an Ethernet  
3 destination address, and wherein the Ethernet destination address is a first host address.

1 14. The method of claim 13, wherein the Ethernet payload has an Internet Protocol header  
2 and an Internet Protocol payload, wherein the Internet Protocol header has an Internet  
3 Protocol source address and an Internet Protocol destination address, and further  
4 including:  
5 determining a second host address based upon the Internet Protocol destination  
6 address in the Internet Protocol header; and  
7 storing the second host address correlated with the first host address in a packet  
8 forwarding table.

9  
10 15. The method of claim 13, wherein the first host address is the address of a real host, and  
11 the second host address is a virtual host address.

1 16. The method of claim 13, wherein the first host address is a virtual host address, and the  
2 second host address is the address of a real host.

1 17. The method of claim 13, further including:  
2 changing the Ethernet source address of the packet to be equal to the first host  
3 address;  
4 changing the Ethernet destination address of the packet to be equal to the second  
5 host address; and  
6 sending the packet.

1 18. The method of claim 13, wherein the Ethernet payload has an Internet Protocol header  
2 and an Internet Protocol payload, wherein the Internet Protocol header has an Internet  
3 Protocol source address and an Internet Protocol destination address, and further  
4 including:  
5 determining a second host address from a packet forwarding table;  
6 changing the Ethernet source address of the packet to the first host address;  
7 changing the Ethernet destination address of the packet to the second host address;  
8 and  
9 sending the packet.

1 19. The method of claim 1, wherein an incoming packet that has a first host address as its  
2 destination address arrives at a port having a first port identifier, and wherein a packet  
3 forwarding table correlates the first host address with a second port identifier; and further  
4 including rejecting the packet if the first port identifier is not equal to the second port  
5 identifier.

1 20. The method of claim 1, wherein the Ethernet payload has an Internet Protocol header and  
2 an Internet Protocol payload, wherein the Internet Protocol header has an Internet  
3 Protocol source address and an Internet Protocol destination address, and further  
4 including:

1 determining a plurality of forwarding host addresses from a packet forwarding  
2 table;  
3 changing the Ethernet source address of the packet to the first host address;  
4 creating a copy of the packet for each forwarding host address;  
5 changing the Ethernet destination address of each copy of the packet to a  
6 forwarding host address; and  
7 sending each copy of the packet.

1 21. The method of claim 20, wherein a forwarding host address is the address of a real host.

1 22. The method of claim 20, wherein a forwarding host address is a virtual host address.

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1 ~~23.~~ A method for handling flows, including:  
2 adding a virtual circuit flag to a packet; and  
3 setting the value of the virtual circuit flag to indicate when the packet belongs to a flow  
4 and requests that the flow recognized by the network.

1 24. The method of claim 23, further including:  
2 determining if the virtual circuit flag indicates a flow; and  
3 if the virtual circuit flag indicates a flow, then replacing the an address of the packet with  
4 a host address.

1 25. The method of claim 24, wherein the source address of the packet is replaced with a host  
2 address.

1 26. The method of claim 24, wherein the destination address of the packet is replaced with a  
2 host address.

1 27. The method of claim 24, wherein the host address is the address of a real host.

1 28. The method of claim 24, wherein the host address is a virtual host address.

